

IN THE CLAIMS

Please amend the claims as follows.

For the Examiner's convenience, a list of all claims is included below.

CLAIMS:

1. (Currently Amended) A method of producing a representation of a streaming media data at a caching proxy server, said method comprising:

transmitting a request for streaming media data to be delivered to said caching proxy server;

transmitting a request for one or more Real-Time Protocol ("RTP") header extensions associated with said streaming media data, wherein each of said one or more RTP header extensions represents a type of related or unrelated data that is necessary for performing a particular transmission operation for a packet of said streaming media data;

receiving said streaming media data and storing said streaming media data on a storage device which is capable of being controlled by said caching proxy server; and
receiving said one or more RTP header extensions associated with said streaming media data, wherein each of said one or more RTP header extensions is a sub-extension in an extensible extended RTP header of the packet of said streaming media data, wherein the sub-extension has a sub-extension name code and data, wherein the sub-extension name code uniquely identifies and describes the type of the data in the sub-extension, and a sub-extension identification (ID) identifying the sub-extension within each RTP packet.

2. (Currently Amended) A method as in claim 1 further comprising:

storing said one or more RTP header extensions associated with said streaming media data in said storage device.

3. (Currently Amended) A method for data transmission from a server data processing system, said method comprising:

receiving a request for streaming media data, said request including a request for one or more Real-Time Protocol ("RTP") header extensions associated with said streaming media data, wherein each of said one or more RTP header extensions represents a type of related or unrelated data that is necessary for performing a particular transmission operation for a packet of said streaming media data ;

responding to the request with a response indicating a capability of the server to support the request; and

sending the requested one or more RTP header extensions associated with said streaming media data, wherein each of said one or more RTP header extensions is a sub-extension in an extensible extended RTP header of the packet of said streaming media data, wherein the sub-extension has a sub-extension name code and data, wherein the sub-extension name code uniquely identifies and describes the type of the data in the sub-extension, and a sub-extension identification (ID) identifying the sub-extension within each RTP packet.

4. (Previously Presented) A method as recited in claim 3, wherein said sending uses a real-time transport protocol (RTP).

5. (Previously Presented) A method as recited in claim 3, wherein said request may be made by a caching proxy server or a client.

6. (Previously Presented) A method as recited in claim 3, wherein the server responding with an echo only if it supports the request.

7. (Canceled)

8. (Previously Presented) A method as recited in claim 3, wherein the extensible extended header comprises an extension name and an extension identification (ID) associated with each separate RTP extension.

9. (Canceled)

10. (Previously Presented) A method as recited in claim 3, wherein the response by the server comprising response for each supported RTP extension data and no response for any unsupported RTP extension data.

11. (Currently Amended) A method as recited in claim 3, further comprising receiving a request to send the streaming media data after sending a response for supported RTP header extensions, and sending only the requested and supported by said one or more RTP header extensions streaming media data.

12. (Currently Amended) A method for operating a caching proxy server comprising:
sending a request for streaming media data to a server, said request including a request for one or more Real-Time Protocol ("RTP") header extensions associated with said streaming media data, wherein each of said one or more RTP header extensions represents a type of data that is necessary for performing a particular transmission operation for a packet of said streaming media data;

receiving a response from the server indicating support for the requested said streaming media data and said one or more RTP header extensions associated with said streaming media data;

informing the server to send the supported said streaming media data and said one or more RTP header extensions associated with said streaming media data;

receiving the supported streaming media data and said one or more RTP header extensions associated with said streaming media data from the server;

receiving a request from the client to send said streaming media data; and

sending the said streaming media data to the client, wherein each of said one or more RTP header extensions is a sub-extension in an extensible extended RTP header of the packet of said streaming media data, wherein the sub-extension has a sub-extension name code and data, wherein the sub-extension name code uniquely identifies and describes the type of data in the sub-extension, and a sub-extension identification (ID) identifying the sub-extension within each RTP packet.

13. (Presently Presented) A method as recited in claim 12, wherein said receiving and sending uses a real-time transport protocol (RTP).

14. (Canceled)

15. (Currently Amended) A method as recited in claim 12, wherein said sending a request may be for one or more various and unrelated types of RTP header extensions associated with streaming media data to be sent at a time.

16. (Currently Amended) A method as recited in claim 12, wherein said response from the server comprising response for each supported type of RTP header extensions associated with streaming media and no response for any unsupported types of RTP header extensions associated with streaming media data.

17. (Previously Presented) A method as recited in claim 12, wherein said extensible extended header format is appended before sending to client.

18. (Previously Presented) A method as recited in claim 17, wherein, appending comprising stripping of name and ID part of the extensible extended header.

19. (Currently Amended) A method as recited in claim 12, further comprising determining if a requested type of RTP header extensions associated with streaming media data, which is required by a caching proxy server to be able to perform its processes, is missing in the response by the server.

20. (Currently Amended) A method as recited in claim 19 further comprising terminating the data transmission process if the requested type of RTP header extensions associated with streaming media data is missing in server's response and is critical to the data transmission process.

21-68 (Canceled)

69. (Currently Amended) A machine-readable medium that provides executable instructions, which when executed by a set of processors, cause said set of processors to perform operations for producing a streaming media data at a caching proxy server comprising:

transmitting a request for streaming media data to be delivered to said caching proxy server;

transmitting a request for one or more Real-Time Protocol (“RTP”) header extensions associated with said streaming media data, wherein each of said one or more RTP header extensions represents a type of related or unrelated data that is necessary for performing a particular transmission operation for a packet of said streaming media data;

receiving said streaming media data and storing said streaming media data on a storage device which is capable of being controlled by said caching proxy server; and

receiving said one or more RTP header extensions associated with said streaming media data, wherein each of said one or more RTP header extensions is a sub-extension in an extensible extended RTP header of the packet of said streaming media data, wherein the sub-extension has a sub-extension name code and data, wherein the sub-extension name code uniquely identifies and describes the type of data in the sub-extension, and a sub-extension identification (ID) identifying the sub-extension within each RTP packet.

70. (Currently Amended) A machine-readable medium as in claim 69 further comprising:

storing said streaming media data and one or more RTP header extensions associated with said streaming media data in said storage device.

71. (Currently Amended) A machine-readable medium that provides executable instructions, which when executed by a set of processors, cause said set of processors to perform data transmission operations from a server data processing system comprising:

receiving a request for streaming media data, said request including a request for one or more Real-Time Protocol (“RTP”) header-extensions associated with said streaming media data, wherein each of said one or more RTP header extensions represents a type of related or unrelated data that is necessary for performing a particular transmission operation for a packet of said streaming media data ;

responding to the request with a response indicating a capability of said server to support the request; and

sending the requested said streaming media data and said one or more RTP header extensions associated with said streaming media data, wherein each of said one or more RTP header extensions is a sub-extension in an extensible extended RTP header of the packet of said streaming media data, wherein the sub-extension has a sub-extension name code and data, wherein the sub-extension name code uniquely identifies and describes the type of data in the sub-extension, and a sub-extension identification (ID) identifying the sub-extension within each RTP packet.

72. (Original) A machine-readable medium as in claim 71, wherein said sending uses a real-time transport protocol (RTP).

73. (Original) A machine-readable medium as in claim 71, wherein said request may be made by a caching proxy server or a client.

74. (Original) A machine-readable medium as in claim 71, wherein said responding with a response occurring only if said server supports the request.

75. (Canceled)

76. (Previously Presented) A machine-readable medium as in claim 71, wherein said extensible extended RTP header comprises an extension name and an extension identification (ID) associated with each separate RTP extension.

77. (Currently Amended) A machine-readable medium as in claim 71, wherein said request may be for one or more type of RTP header extensions associated with streaming media data at a time.

78. (Currently Amended) A machine-readable medium as in claim 71, wherein said response by the server comprising response for each supported RTP header extensions and no response for any unsupported RTP header extensions.

79. (Currently Amended) A machine-readable medium as in claim 71, further comprising receiving a request to send the streaming media data after sending a response for supported RTP header extensions, and sending only the requested streaming media data supported by RTP header extensions.

80. (Currently Amended) A machine-readable medium that provides executable instructions, which when executed by a set of processors, cause said set of processors to perform data transmission operations comprising:

sending a request for streaming media data to said server, said request including a request for one or more Real-Time Protocol (“RTP”) header extensions associated with said streaming media data, wherein each of said one or more RTP header extensions represents a type of related

or unrelated data that is necessary for performing a particular transmission operation for a packet of said streaming media data;

receiving a response from said server indicating support for the requested streaming media data;

informing said server to send the streaming media data supported by RTP header extensions associated with said streaming media data;

receiving the supported streaming media data from said server;

receiving a request from a client to send streaming media data; and

sending the requested streaming media data to said client, wherein each of said one or more RTP header extensions is a sub-extension in an extensible extended RTP header of the packet of said streaming media data, wherein the sub-extension has a sub-extension name code and data, wherein the sub-extension name code uniquely identifies and describes the type of data in the sub-extension, and a sub-extension identification (ID) identifying the sub-extension within each RTP packet.

81. (Original) A machine-readable medium as in claim 80, wherein said receiving and sending uses a real-time transport protocol (RTP).

82. (Previously Presented) A machine-readable medium as in claim 80, wherein said receiving streaming media data from the server is in an extensible extended RTP header format.

83. (Currently Amended) A machine-readable medium as in claim 80, wherein said sending a request may be for one or more various and unrelated types of RTP header extensions associated with streaming media data to be sent at a time.

84. (Previously Presented) A machine-readable medium as in claim 80, wherein said response from the server comprising response for each supported type of streaming media data and no response for any unsupported types of streaming media data.

85. (Previously Presented) A machine-readable medium as in claim 82, wherein said extensible extended RTP header is appended before sending to client.

86. (Previously Presented) A machine-readable medium as in claim 80, wherein said sending the requested streaming media data to said client comprises stripping of name and ID part of the extensible extended header.

87. (Currently Amended) A machine-readable medium as in claim 80, further comprising determining if a requested type of RTP header extensions associated with streaming media data, which is required by a caching proxy server to be able to perform its processes, is missing in the response by the server.

88. (Currently Amended) A machine-readable medium as in claim 87, further comprising terminating the data transmission process if the requested type of RTP header extensions associated with streaming media data is missing in server's response and is critical to the data transmission process.

89-136 (Canceled)

137. (Currently Amended) A caching proxy server comprising:

means for transmitting a request for streaming media data to be delivered to said caching proxy server;

means for transmitting a request for one or more Real-Time Protocol (“RTP”) header extensions associated with said streaming media data, wherein each of said one or more RTP header extensions represents a type of related or unrelated data that is necessary for performing a particular transmission operation for a packet of said streaming media data;

means for receiving said streaming media data and storing said streaming media data on a storage device which is capable of being controlled by said caching proxy server; and

means for receiving said one or more RTP header extensions associated with said streaming media data, wherein each of said one or more RTP header extensions is a sub-extension in an extensible extended RTP header of the packet of said streaming media data, wherein the sub-extension has a sub-extension name code and data, wherein the sub-extension name code uniquely identifies and describes the type of data in the sub-extension, and a sub-extension identification (ID) identifying the sub-extension within each RTP packet.

138. (Currently Amended) A server data processing system comprising:

means for receiving a request for streaming media data, said request including a request for one or more Real-Time Protocol (“RTP”) header extensions associated with said streaming media data, wherein each of said one or more RTP header extensions represents a type of related or unrelated data that is necessary for performing a particular transmission operation for a packet of said streaming media data;

means for responding to the request with a response indicating a capability of the server to support the request; and

means for sending the requested one or more RTP header extensions associated with said streaming media data, wherein each of said one or more RTP header extensions is a sub-extension in an extensible extended RTP header of the packet of said streaming media data, wherein the sub-extension has a sub-extension name code and data, wherein the sub-extension name code uniquely identifies and describes the type of data in the sub-extension, and a sub-extension identification (ID) identifying the sub-extension within each RTP packet.

139. (Currently Amended) A caching proxy server comprising:

means for sending a message for streaming media data to a server, said request including a request for one or more Real-Time Protocol (“RTP”) header extensions associated with said streaming media data, wherein each of said one or more RTP header extensions represents a type of related or unrelated data that is necessary for performing a particular transmission operation for a packet of said streaming media data;

means for receiving a response from the server indicating support for the requested streaming media data;

means for informing the server to send the said streaming media data having one or more RTP header extensions associated with said streaming media data;

means for receiving said streaming media data having one or more RTP header extensions from the server;

means for receiving a request from the client to send streaming media data; and

means for sending the requested streaming media data to the client, wherein each of said one or more RTP header extensions is a sub-extension in an extensible extended RTP header of the packet of said streaming media data, wherein the sub-extension has a sub-extension name code and data, wherein the sub-extension name code uniquely identifies and describes the type of

data in the sub-extension, and a sub-extension identification (ID) identifying the sub-extension within each RTP packet.

140. (Canceled)

141. (Currently Amended) A server comprising:

means for receiving a request for streaming media data from a caching proxy server or a client, said request including a request for one or more Real-Time Protocol (“RTP”) header extensions associated with said streaming media data, wherein each of said one or more RTP header extensions represents a type of related or unrelated data that is necessary for performing a particular transmission operation for a packet of said streaming media data;

means for determining if requested types of RTP header extensions associated with said streaming media data are supported by the server; and

means for responding to the request with a response indicating the capability of the server to support the request, wherein each of said one or more RTP extensions is a sub-extension in an extensible extended RTP header of the packet of said streaming media data, wherein the sub-extension has a sub-extension name code and data, wherein the sub-extension name code uniquely identifies and describes the type of data in the sub-extension, and a sub-extension identification (ID) identifying the sub-extension within each RTP packet.

142. (Currently Amended) A caching proxy server comprising:

means for sending a request for streaming media data to a server, said request including a request for one or more types of Real-Time Protocol (“RTP”) header extensions associated with said streaming media data, wherein each of the one or more types of RTP header extensions

represents a type of related or unrelated data that is necessary for performing a particular transmission operation for a packet of said streaming media data;

means for receiving a response to each requested type of RTP header extensions associated with said streaming media data; and

means for deciding whether to proceed or terminate negotiation process associated with said streaming media data, wherein each of the one or more types of RTP header extensions is a sub-extension in an extensible extended RTP header of the packet of said streaming media data, wherein the sub-extension has a sub-extension name code and data, wherein the sub-extension name code uniquely identifies and describes the type of data in the sub-extension, and a sub-extension identification (ID) identifying the sub-extension within each RTP packet.

143-144 (Canceled)

145. (Currently Amended) A caching proxy server comprising:

means for requesting transmit time Real-Time Protocol ("RTP") header -extensions for streaming media data from a server;

means for receiving said streaming media data and corresponding transmit time RTP header extensions from the server;

means for storing the received information; and

means for transmitting from said caching proxy server to a client said streaming media data at times specified by said transmit time RTP header extensions, wherein each of the transmit time RTP header extensions is a sub-extension in an extensible extended RTP header of the packet of said streaming media data, wherein the sub-extension has a sub-extension name code and data, wherein the sub-extension name code uniquely identifies and describes the type of data

in the sub-extension, and a sub-extension identification (ID) identifying the sub-extension within each RTP packet.